

REGION 6 EXECUTIVE SUMMARY

TOPIC: Johnny M Mine Area (b) (6) Property), San Mateo, McKinley County, New Mexico Site

DATE: March 11, 2011

CONTACT: Jon Rinehart-Warren Zehner

PURPOSE/ACTION NEEDED: Relocation of a property owner next abandoned uranium mine

DEADLINE DATE: March 11, 2011

BACKGROUND:

EPA has completed a preliminary radiation removal assessment sampling on the Tom (b) (6) property. This property is located approximately 0.3 mile west of the former Johnny M Mine uranium underground mine. This mine was operated by Ranchers Exploration and Development which merged with Hecla Mining Company in 1984. Active mining and production occurred from 1972-1982. The New Mexico Environmental Improvement Division issued Ranchers a Radioactive Material License to allow the mine to inject mill waste to backfill mine stopes and then provide for closure of the mine. Regulatory oversight was transferred to the Nuclear Regulatory Commission (NRC) in 1986. The NRC terminated the Material Source License in 1993 upon completion of closure and reclamation.

In October 2009, ASPECT conducted an aerial radiological survey as part of the initial delineation of radiological contamination in the non-Navajo areas of the Grants Mineral Belt. The Johnny M Mine area was identified as having high levels of radiation during the ASPECT survey. EPA contacted the Johnny M property owner about conducting a radiological contamination structure assessment on his property, but he declined access. In November 2010, EPA was contacted by the NMED about potential radiological contamination at a home site adjacent to the Johnny M Mine. EPA conducted the Phase 1 radiological structure assessment in November 2010. This survey indicated high radiation levels around the house. Phase 2 assessment results indicated high levels of radiation inside the residence and elevated levels of radon. The results of the three radon detectors were 18, 19, and 19 pCi/l. The EPA and CDC action level for radon is 4 pCi/l. Due to the high levels of radiation present around the residence, additional radiological testing was deemed necessary to establish the extent of contamination on the property. High levels of radiation were found in the northeast quadrant of the property and in and around the two corral/barn areas on the property. The corral/barn areas house several pregnant mares, geldings, and a stud horse. As part of the PA/SI process, the NMED sampled the drinking water well on the (b) (6) property. Sample results reported on March 1, 2011 indicate that the drinking water well exceeds the MCL for gross alpha 17.3 pCi/l (standard 15pCi/l) and Radium 226/228 6.0 pCi/l (standard 5 pCi/l).

CURRENT STATUS:

An Action Memo is being drafted to address the radiological threats and ISE on this property. This removal action will entail removing contaminated soil from around the home and around the barn/corral areas, abating the excess radon in the home and addressing the well contamination through filtration. Based on the unsafe levels of radiation present at the surface of the property, inside the residence and barns, and the contaminated drinking water well it appears that temporary relocation of the resident and his livestock prior the EPA or PRP lead removal action is warranted.

ENFORCEMENT:

Hecla was verbally notified of EPA's intention to temporarily relocate (b) (6) on March 10, 2011. The EPA provided Hecla with maps and data illustrating the areas of concern. A General Notice

Letter will be issued to Hecla for the Removal Action.

ENVIRONMENTAL/PUBLIC HEALTH CONCERNS:

High levels of radiation are present in and around the home and the barn/corrals. High radon levels are present in the home. The only source of drinking water for the resident and the livestock is contaminated with radiation and not usable.

TECHNICAL CONCERNS:

Additional sampling as part of the extent of contamination survey is on-going to better characterize the property and will be utilized for any PRP lead clean-up negotiations.

REGULATORY/LEGAL REQUIREMENTS:

A Time Critical Action Memo will be ready for Superfund Division concurrence on April 1, 2011.

COMMUNITY CONCERNS:

- Most residents are eager to have uranium mining and good paying jobs return to the Grants Area. This area is economically depressed.
- While the residents are eager for jobs, they are also aware and concerned about the legacy contamination issues from previous mining and milling, and are generally supportive of EPA investigative effort in the area.
- Activities are being coordinated with NMED, New Mexico Department of Health, and ATSDR.

RECOMMENDATIONS:

It is recommended that the homeowner and his livestock be temporarily relocated from the property until a removal can be complete to address the ISE on this property.



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